

# Fishing for Snakeheads: Control of an Invasive Species

## The Problem

Northern snakehead (NSH) has been in the Potomac River since at least 2004. Recently, several NSH have been caught in the Patuxent River, Nanticoke River, and Wicomico River drainages. Possession of live NSH is illegal in Maryland because it has negative and predatory impacts on Maryland's fishes and is capable of rapid population growth and expansion. To help control this species, recreational anglers target NSH. In 2012, commercial watermen also harvested NSH to reduce NSH biomass.

## The Questions

- What do MD DNR relative abundance indices indicate about changes in NSH population size since 2004?
- How have anglers been successfully targeting and catching NSH?
- How many NSH have been caught by anglers and watermen?

## Methods

- Summarize catch data on NSH in tidal fresh Potomac River
- Summarize data from anglers' fishing reports and commercial reports

## Results

- NSH was first caught by MD Tidal Bass Program in 2006, two years after the first catches in Dogue Creek (VA)
- Since 2006, NSH distribution in MD has rapidly increased
  - ➔ Tidal Bass Program found that the number of sites with NSH has doubled since 2010 to nearly 40% in 2012
  - ➔ Relative abundance of NSH has doubled most years
  - ➔ From April to June, snakehead migrate upstream, often stopped by dams, during high stream flow and presumably to spawn
- Since 2011, at least 1290 NSH have been caught and killed by anglers during a *MD DNR Anglers' Log contest* and by commercial watermen
  - ➔ NSH caught mainly during spring, near submerged structure, grasses, and often in shallows
  - ➔ Females with ripe eggs caught April to June; some females may also spawn during August
  - ➔ NSH attacked a variety of tackle used in bass fishing, commonly spinners, worms, and frogs
  - ➔ Bow hunting for NSH - popular, particularly at night
  - ➔ Largest NSH killed and reported was about 18 pounds

## Discussion

Anglers are handling, killing, cooking, and eating the fish. Additional work in 2013 will include: a) population estimates in some tributaries; b) genetic work; and c) building on current knowledge of how snakehead impact fishes.

**Acknowledgements:** Thanks to anglers for reporting catches and the sponsors of the contest! Thanks to Josh Newhard (USFWS) for assistance with public

awareness materials. Please buy a fishing license – proceeds help pay for the Tidal Bass Program and protect bass fishing. **For questions or comments:** Joseph W. Love, Ph.D., Tidal Bass Manager, 580 Taylor Avenue, B-2, Annapolis, MD, 21401. Phone: (410) 260-8257. E-mail: jlove@dnr.state.md.us.



**2012 MDDNR Snakehead Angler Contest Winners!**

**Kasie Taylor**  
Winner of a \$200 gift card

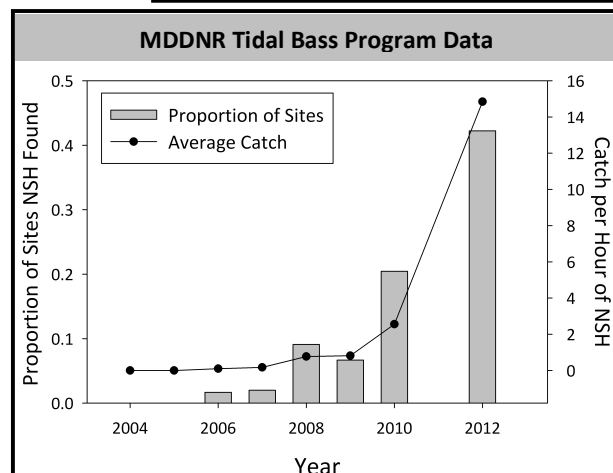
Wednesday, a 23.5 inch Potomac River fish in and out (which is what I said Oh no, I was waiting to hand my dad first time in a

**Les King**  
Winner of a PRFC Fishing License

Yesterday I went bow fishing for my first time with James Berry. I was able to arrow 2 fish one of which was tagged. The tagged fish was 21 inches long and weighed 2 pounds and 5 ounces

**Jerry Lester**  
Winner of a Maryland State Park Passport

I caught this snakehead on April 3, 2012. Caught two on 4-3 and three on 4-4 and one on 4-5 using a chatterbait. Caught some before that and some after that I didn't get pictures of. Snakehead caught in Potomac River Quantico VA



Data from DNR NSH Anglers' Log Contest	MA-MY	JE-SE	OC-NO	DE-FE	TOTAL
% NSH Caught with SPINNER/SPOON	62%	34%	4%	NA	50
% NSH Caught with FROG	33%	58%	8%	NA	48
% NSH Caught with WORM/PLASTIC	62%	38%	0%	NA	39
% NSH Caught with BOW	50%	50%	0%	NA	36
% NSH Caught with SWIM BAIT	50%	42%	8%	NA	24
% NSH Caught with CRANKBAIT/DIVER	67%	27%	7%	NA	15
% NSH Caught with OTHER	67%	33%	0%	NA	6
Recreational (18 months) # NSH Caught	315	254	14	NA	583
Commercial (9 events) # NSH Caught	226	0	12	220	458
NSH Tournament (2 events) # NSH Caught	249	0	0	0	249
<b>TOTAL</b>	<b>790</b>	<b>254</b>	<b>26</b>	<b>220</b>	<b>1290</b>